CLAIMS:

What is claimed is:

1   1.   A method in a data processing system for processing
2   a request, the method comprising:
3   receiving the request;
4   responsive to a first hash value being present
5   within the request, comparing the first hash value to a
6   second hash value, wherein the second hash value
7   represents a current policy configuration for a quality
8   of service; and
9   responsive to a match between the first hash value
10 and the second hash value, setting a quality of service
11 based on information associated with the first hash
12 value.

1   2.   The method of claim 1, wherein the first hash value
2   and the information are located in a cookie within the
3   request.

1   3.   The method of claim 2, wherein the cookie is located
2   within a header of the request.

1   4.   The method of claim 1, wherein the request is a
2   hypertext transport protocol request.

1 5.   The method of claim 1 further comprising:

2   responsive to an absence of a hash value in the

3 request, identifying a policy rule for processing the

4 request to form an identified policy rule;

5   identifying a classification for the request using

6 the identified policy rule;

7   hashing the current policy configuration, of which

8 the identified policy rule is a part, using a hashing

9 algorithm to generate a current hash value; and

10   placing the current hash value and the information

11 into the request.

1 6.   The method of claim 5, wherein the hash value and

2 the information are placed into a cookie.

1 7.   The method of claim 1, wherein the data processing

2 system is a server.

1 8.   A method in a data processing system for processing

2 a request, the method comprising:

3   responsive to receiving a request containing a

4 selected cookie in which the selected cookie includes a

5 first hash value and information associated with the hash

6 value, determining whether the first hash value

7 corresponds to a second hash value, wherein the second

8 hash value represents a current policy configuration for

9 processing requests by the data processing system; and

10   responsive to a correspondence between the first
11   hash value and the second hash value, processing the
12   request using the information.

1   9.   The method of claim 8 further comprising:
2   responsive to receiving a request containing the
3   selected cookie, determining whether the selected cookie
4   is stale;
5   responsive to an absence of a determination that the
6   cookie being is stale, generating a new classification
7   for the request; and
8   responsive to the cookie being stale, preventing
9   initiation of the determining step.

1   10. The method of claim 9 further comprising:
2   responsive to an absence of the selected cookie,
3   processing the request with the current policy
4   configuration to generate a first classification for the
5   request;
6   applying a hashing algorithm to the current policy
7   configuration to generate the first hash value; and
8   placing the first hash value and information
9   associated with the first hash value within a new cookie.

1   11. The method of claim 8, wherein the selected cookie
2   includes a universal resource identifier, a user
3   identification, and a user group identification.

1   12.   The method of claim 8, wherein the information

2   includes a quality of service indicator.

1   13.   A data processing system comprising:

2   a bus system;

3   a communications unit connected to the bus system;

4   a memory connected to the bus system, wherein the

5   memory includes a set of instructions; and

6   a processing unit connected to the bus system,

7   wherein the processing unit executes the set of

8   instructions to receive the request; compare the first

9   hash value to a second hash value in response to a first

10   hash value being present within the request, wherein the

11   second hash value represents a current policy

12   configuration for a quality of service; and set a quality

13   of service based on information associated with the first

14   hash value in response to a match between the first hash

15   value and the second hash value.

1   14.   A data processing system comprising:

2   a bus system;

3   a communications unit connected to the bus system;

4   a memory connected to the bus system, wherein the

5   memory includes a set of instructions; and

6   a processing unit connected to the bus system,

7   wherein the processing unit executes the set of

8   instructions to determine whether the first hash value

9   corresponds to a second hash value in response to

10   receiving a request containing a selected cookie in which

11   the selected cookie includes a first hash value and

12   information associated with the hash value, wherein the

13   second hash value represents a current policy

14   configuration for processing requests by the data

15   processing system; and process the request using the

16   information in response to a correspondence between the

17   first hash value and the second hash value.

1   15. A data processing system for processing a request,

2   the comprising:

3   receiving means for receiving the request;

4   comparing means, responsive to a first hash value

5   being present within the request, for comparing the first

6   hash value to a second hash value, wherein the second

7   hash value represents a current policy configuration for

8   a quality of service; and

9   setting means, responsive to a match between the

10   first hash value and the second hash value, for setting a

11   quality of service based on information associated with

12   the first hash value.

1   16. The data processing system of claim 15, wherein the

2   first hash value and the information are located in a

3   cookie within the request.

1   17. The data processing system of claim 16, wherein the

2   cookie is located within a header of the request.

1   18.   The data processing system of claim 15, wherein the

2   request is a hypertext transport protocol request.

1   19.   The data processing system of claim 15 further

2   comprising:

3   first identifying means, responsive to an absence of

4   a hash value in the request, for identifying a policy

5   rule for processing the request to form an identified

6   policy rule;

7   second identifying means for identifying a

8   classification for the request using the identified

9   policy rule;

10   hashing means for hashing the current policy

11   configuration, of which the identified policy rule is a

12   part, using a hashing algorithm to generate a current

13   hash value; and

14   placing means for placing the current hash value and

15   the information into the request.

1   20.   The data processing system of claim 19, wherein the

2   hash value and the information are placed into a cookie.

1   21.   The data processing system of claim 15, wherein the

2   data processing system is a server.

1   22.   A data processing system for processing a request,

2   the data processing system comprising:

3   determining means, responsive to receiving a request

4   containing a selected cookie in which the selected cookie

5 includes a first hash value and information associated

6 with the hash value, for determining whether the first

7 hash value corresponds to a second hash value, wherein

8 the second hash value represents a current policy

9 configuration for processing requests by the data

10 processing system; and

11 processing means, responsive to a correspondence

12 between the first hash value and the second hash value,

13 for processing the request using the information.

1 23. The method of claim 22, wherein the determining

2 means is a first determining means and further

3 comprising:

4 second determining means, responsive to receiving a

5 request containing the selected cookie, for determining

6 whether the selected cookie is stale;

7 generating means, responsive to an absence of a

8 determination that the cookie being is stale, for

9 generating a new classification for the request; and

10 preventing means, responsive to the cookie being

11 stale, for preventing initiation of the determining

12 means.

1 24. The data processing system of claim 23, wherein the

2 processing means is a first processing means and further

3 comprising:

4   second processing means, responsive to an absence of

5   the selected cookie, for processing the request with the

6   current policy configuration to generate a first

7   classification for the request;

8   applying means for applying a hashing algorithm to

9   the current policy configuration to generate the first

10 hash value; and

11 placing means for placing the first hash value and

12 information associated with the first hash value within a

13 new cookie.

1   25.   The data processing system of claim 22, wherein the

2   selected cookie includes a universal resource identifier,

3   a user identification, and a group identification.

1   26.   The data processing system of claim 22, wherein the

2   information includes a quality of service indicator.

1   27.   A computer program product in a computer readable

2   medium for processing a request, the computer program

3   product comprising:

4   first instructions for receiving the request;

5   second instructions, responsive to a first hash

6   value being present within the request, for comparing the

7   first hash value to a second hash value, wherein the

8   second hash value represents a current policy

9   configuration for a quality of service; and

10	third instructions, responsive to a match between
11	the first hash value and the second hash value, for
12	setting a quality of service based on information
13	associated with the first hash value.

1	28. The computer program product of claim 27, wherein
2	the first hash value and the information are located in a
3	cookie within the request.

1	29. The computer program product of claim 28, wherein
2	the cookie is located within a header of the request.

1	30. The computer program product of claim 27, wherein
2	the request is a hypertext transport protocol request.

1	31. The computer program product of claim 27 further
2	comprising:
3	fourth instructions, responsive to an absence of a
4	hash value in the request, for identifying a policy rule
5	for processing the request to form an identified policy
6	rule;
7	fifth instructions for identifying a classification
8	for the request using the identified policy rule;
9	sixth instructions for hashing the current policy
10	configuration, of which the identified policy rule is a
11	part, using a hashing algorithm to generate a current
12	hash value; and
13	seventh instructions for placing the current hash
14	value and the information into the request.

1   32.   The computer program product of claim 31, wherein
2   the hash value and the information are placed into a
3   cookie.

1   33.   The computer program product of claim 27, wherein
2   the data processing system is a server.

1   34.   A computer program product in a computer readable
2   medium for processing a request, the computer program
3   product comprising:
4   first instructions, responsive to receiving a
5   request containing a selected cookie in which the
6   selected cookie includes a first hash value and
7   information associated with the hash value, for
8   determining whether the first hash value corresponds to a
9   second hash value, wherein the second hash value
10 represents a current policy configuration for processing
11 requests by the data processing system; and
12   second instructions, responsive to a correspondence
13 between the first hash value and the second hash value,
14 for processing the request using the information.

1   35.   The computer program product of claim 34 further
2   comprising:
3   third instructions, responsive to receiving a
4   request containing the selected cookie, for determining
5   whether the selected cookie is stale;

6   fourth instructions, responsive to an absence by a

7   determination that the cookie being is stale, for

8   generating a new classification for the request; and

9   fifth instructions, responsive to the cookie being

10   stale, for preventing initiation of the determining step.

1   36. The computer program product of claim 35 further

2   comprising:

3   sixth instructions, responsive to an absence of the

4   selected cookie, for processing the request with the

5   current policy configuration to generate a first

6   classification for the request;

7   seventh instructions for applying a hashing

8   algorithm to the current policy configuration to generate

9   the first hash value; and

10   eighth instructions for placing the first hash value

11   and information associated with the first hash value

12   within a new cookie.

1   37. The computer program product of claim 34, wherein

2   the selected cookie includes a universal resource

3   identifier, a user identification, and a group

4   identification.

1   38. The computer program product of claim 34, wherein

2   the information includes a quality of service indicator.